What is claimed is:

1. A device that embeds an electronic watermark into an original image, comprising:

a circuit that performs discrete cosine transform (DCT) for the original image to output DCT coefficients;

a circuit that embeds the watermark into the DCT coefficients, the watermark containing in a part thereof an instruction to an electronic watermark detection device;

a circuit that quantizes the DCT coefficients into which the watermark is embedded; and

a circuit that variable-length encodes the quantized DCT coefficients.

2. The device according to claim 1 wherein the electronic watermark is eight-bit data and the instruction is four-bit data.

3. The device according to claim 1 or 2 wherein the instruction displays characters.

4. The device according to claim 1 or 2 wherein the instruction accesses a web site on the Internet.

5. The device according to claim 1 or 2 wherein the instruction starts an application program.

6. A device that detects an electronic watermark embedded in an original image, comprising:

a circuit that decodes compressed image data in which the

watermark is embedded;

a circuit that performs inverse discrete cosine transform (IDCT) for the decoded data;

a circuit that detects electronic watermark data embedded in the data for which IDCT has been performed; and

a circuit that performs a predetermined processing according to an instruction included in a part of the electronic watermark.

7. The device according to claim 6 wherein the electronic watermark is eight-bit data and the instruction is four-bit data.

8. The device according to claim 6 or 7 wherein characters are displayed according to the instruction.

9. The device according to claim 6 or 7 wherein a web site on the Internet is accessed according to the instruction.

10. The device according to claim 6 or 7 wherein an application program is started according to the instruction.

11. A method for embedding an electronic watermark into an original image, comprising the steps of:

performing discrete cosine transform (DCT) for the original image to output DCT coefficients;

embedding the watermark into the DCT coefficients, the watermark containing in a part thereof an instruction to an electronic watermark detection device;

quantizing the DCT coefficients into which the watermark is embedded; and

variable-length encoding the quantized DCT coefficients.

12. The method for inserting a watermark according to claim 11 wherein the electronic watermark is eight-bit data and the instruction is four-bit data.

13. The method according to claim 11 or 12 wherein the instruction displays characters.

14. The method according to claim 11 or 12 wherein the instruction accesses a web site on the Internet.

15. The method according to claim 11 or 12 wherein the instruction starts an application program.

16. A method for detecting an electronic watermark embedded in an original image, comprising the steps of:

decoding compressed image data in which the watermark is embedded;

performing inverse discrete cosine transform (IDCT) for the decoded data;

detecting electronic watermark data embedded in the data for which IDCT has been performed; and

performing a predetermined processing according to an instruction included in a part of the electronic watermark.

17. The method according to claim 16 wherein the electronic watermark is eight-bit data and the instruction is four-bit data.

18. The method according to claim 16 or 17 wherein characters are displayed according to the instruction.

19. The method according to claim 16 or 17 wherein a web site on the Internet is accessed according to the instruction.

20. The method according to claim 16 or 17 wherein an application program is started according to the instruction.

21. A computer readable recording medium storing therein a program for embedding an electronic watermark into an original image, said program causing a computer to:

perform discrete cosine transform (DCT) for the original image to output DCT coefficients;

embed the watermark into the DCT coefficients, the watermark containing in a part thereof an instruction to an electronic watermark detection device;

quantize the DCT coefficients into which the watermark is embedded; and

variable-length encode the quantized DCT coefficients.

22. A computer-readable recording medium storing therein a program for detecting an electronic watermark embedded in an original image, said program causing a computer to:

decode compressed image data in which the watermark is embedded;

perform inverse discrete cosine transform (IDCT) for the decoded data;

detect electronic watermark data embedded in the data for which IDCT has been performed; and

perform a predetermined processing according to an instruction included in a part of the electronic watermark.